Normalization :

**Superintend** ( prison code , name, capacity, officers id , name , age , contact no, batch ,rank , shift)

1NF: contact no is a multivalued attribute

2NF:

prison code , name , capacity

officers id , name , age , contact no, batch ,rank , shift

3NF:

prison code , name , capacity

officers id , name , age, batch ,rank , shift

Officers id,contact no

TABLES FROM SUPERINTED:

1. prison code , name, capacity

2. officers id , name , age, batch ,rank , shift, prison code

1. Officers id,contact no - composite pk

**Register**(officers id , name , age , contact no, batch ,rank , shift, case id , case type , issue date)

1NF: contact no is a multivalued attribute

2NF:

officers id , name , age , contact no, batch ,rank , shift

case id , case type , issue date

3NF:

officers id , name , age, batch ,rank , shift

officers id, contact no

case id , case type , issue date

**tables from Register:**

1. officers id , name , age , batch ,rank , shift, case id

2. officers id, contact no

3. case id , case type , issue date

**Distributed by** (officers id , name , age , contact no, batch ,rank , shift, Id, name, contact no)

1NF: contact no is a multivalued attributes

2NF:

officers id , name , age , contact no, batch ,rank , shift

Id, name ,contact no

3NF:

1. officers id , name , age , batch ,rank , shift
2. officers id, , contact no
3. Id name ,contact no
4. Id, contact no

**tables from Distributed by:**

1. officers id , name , age , batch ,rank , shift,id
2. officers id, , contact no
3. Id, name ,contact no
4. Id,contact no

**guard** ( Id, ,name ,contact no, number ,capacity)

1NF: contact no is a multivalued attributes

2NF:

Id, name ,contact no

number ,capacity

3NF:

Id, name

Id, contact no

number ,capacity

**tables from guard:**

1. Id, name ,contact no, number

2. Id, contact no

3. number ,capacity

**Stay in**(number ,capacity, prisoner id,name, date of in, age,gender, blood group ,work type, eat)

1NF: there is no multivalued attributes

2NF:

number ,capacity

prisoner id,name, date of in, age,gender, blood group ,work type, eat

3NF:

number ,capacity

prisoner id,name, date of in, age,gender, blood group ,work type, eat

**tables from Stay in:**

1. number ,capacity,

2. prisoner id,name, date of in, age,gender, blood group ,work type, number

**Visit (**prisoner id,name, date of in, age,gender, blood group ,work type, eat, visitors id, name, phone number, relation with prisoner)

1NF: phone number is a multivalued attribute

2NF:

prisoner id,name, date of in, age,gender, blood group ,work type, eat

visitors id, name, phone number, relation with prisoner

3NF:

prisoner id,name, date of in, age,gender, blood group ,work type, eat

visitors id, name, relation with prisoner

visitors id, phone number

**tables from Visit**

1. prisoner id,name, date of in, age,gender, blood group ,work type, visitors id
2. visitors id, name, relation with prisoner
3. visitors id, phone number

**NORMALIZATION :**

prison code , name, capacity, - prison

Officers id,contact no - composite pk- officer\_contact(one- many)

officers id , name , age , batch ,rank , shift, case id, constable\_id, prison code - officers

case id , case type , issue date- prisoners\_case

constable Id, mobile\_no -constable\_contact(one –many)

constable Id, name ,contact no, number- constable

number ,capacity, prison\_cell-(one-many)

prisoner id,name, date of in, age,gender, blood group ,work type, number ,case id, visitors id- prisoners

visitors id, name, relation with prisoner- visitors

visitors id, phone num- visitor\_contact(one-many)